Designing your own path to proficiency in Revit ®

This document is a text version of a presentation by Luis Ashelford at the South Coast Revit User Group (SCRUG) meeting in Irvine, CA on Thursday, February 28th, 2013.

Introduction

Let me introduce myself: I am Luis Ashelford, and I welcome this new initiative through which SCRUG members give brief presentations about themselves. I look forward to learning more about the rest of you in future meetings.

Jay asked me to share tonight about how I learned Revit through self-study rather than from formal classes. I'm convinced anyone who wants to can learn Revit this way.

What you will learn

Here is what I hope you will get from my presentation:

- Why I think it's possible for anyone to learn Revit this way
- · How I did it
- Tips, resources, and other things I found useful.

You can teach yourself Revit

If I can teach myself Revit, then so can anyone in this room. Why do I think that? Because I'm probably the only person here without a career history as an architect or an architectural degree.

My day job for many years was in Information Technology, including over 20 years at Xerox Corporation. I was a software developer, system administrator, instructional designer, technical trainer and writer, and project manager. I helped bring to market a number of xerographic laser printing systems. I also wrote and produced dozens of end user and service manuals and other teaching materials. After Xerox, I worked for a non-profit corporation performing project management and business analysis tasks.

But architecture is my true passion, and has been ever since I can remember.

The walls of my home are lined with hundreds of architecture and construction-related books. I took every architecture and drafting class offered in high school. By then, however, the first personal computers were becoming available, so I took a tangent away from architecture and into computers.

I used AutoCAD briefly, in the late 1980s, to test printer drivers. I saw AutoCAD's potential for architectural design, and considered it to design a house I was planning to build. However, the investment of time needed to learn it was incompatible with my 12-hour plus work days. So, I laid out the plans by hand in my spare time. I was the general contractor. The house was my home for some 12 years.

Jay refers to me as an "expert" in the works of John Lautner. I make no such claims, but I did create two videos on houses by John Lautner on YouTube, and I am modeling one of his houses.

What was my path?

In addition to being a technology geek, I am passionate about sustainable, green building methods, including rammed earth construction. So, in 2007, I took a class in rammed earth construction at Sirewall, in British Columbia, Canada. An architect in the class told me about this CAD software named Revit, which appended meta data to modeled objects (BIM). I thought: "That sounds cool!" I went to the Autodesk Revit Architecture website, and was blown away by what Revit can do.

I bought the Revit software in early 2009. However, when I used the Autodesk "Imperial Tutorials," I was so frustrated by the many technical errors and other defects that I decided against spending money on the official training classes. I found myself editing the tutorials to make them more accurate and usable. That is when I decided to seek alternatives.

Over the years, I have made a number of projects, some of which are documented on my website.

My website

Let me show you some of what I have done with Revit. Here is an overview of http://www.ashelford.net. At the top is a listing of news, followed by an initial rendering thumbnail for each project on the left, which is accompanied by a description on the right. To use the site, select a rendering to jump to a page of project-specific images and descriptions. See Figure 1 "ashelford.net website screen capture" for a depiction of my website.

Figure 1. ashelford.net website screen capture

Architectural Renderings by Luis Ashelford

Welcome to my online rendering portfolio! This site includes architectural model renderings and floor plans created with the Autodesk ® Revit ® Architecture application (versions 2009 through 2013). Descriptive text accompanies the renderings providing background information about the rendering and/or the project. Links to YouTube videos and other files generated by me as well as links to other architecture-related sites of interest are also included.

News:

- My YouTube slide show video of John Lautner's Elrod House has been viewed over 19,000 times.
- My YouTube slide show video of John Lautner's Sheats/Goldstein House has been viewed over 11,500 times.
- Two renderings of the Ashelford Residence won an award in the Presentation Competition at the Revit Technology Conference (RTC) North America 2011 on June 25, 2011.
- I will present a talk "The Process of Self Teaching" to the South Coast Revit Users Group on Thursday February 28, 2013.

Please take a look at this site and then let me know what you think of my work.

How to use this site

Select an image below to display a project-specific page of renderings. Then, select a rendering for viewing in full size.

Use your web browser's < Back button to return to this page.



Ashelford residence

The 2,400 square-foot, single-family Ashelford residence was designed in 1989-1990 without the use of computer-aided drafting. The program consisted of creating as much living space on the lot as the city's setback and height requirements (and my budget) would allow. It includes the following: four bedrooms, two and a half bathrooms, living room, kitchen, dining room, three-car garage, workshop, lap pool, and two compact car parking spaces.

Building materials consist of balloon-framed construction, including glue-laminated structural beams upon reinforced concrete masonry unit foundations. Stucco was applied on the exterior, and drywall on the interior surfaces. All of the glazing uses black anodized aluminum mullions.

Most of the rooms have custom mitered-corner windows in an effort to, as Mr. Frank Lloyd Wright phrased it, "break the box".

The first set of renderings are of the house I mentioned earlier, which was designed by hand then later modeled in Revit. To access the entire project page, select this rendering. The first two images on this page won a presentation competition award at the inaugural North American Revit Technology Conference (RTC) in 2011. Jim Balding and my wife urged me to enter the competition. To my great surprise, I won an award. If I can do it, so can you! At the end of the page are additional descriptions of the project. Use your browser's back button to return to the previous page.

There are other projects depicted on the first page of the website. These include a model of the first Harpel House by John Lautner; and a model of a cabin, which is based upon the work of Mr. Wright but designed to make use of rammed earth. I created the material from a photo of an actual rammed earth wall.

Near the bottom of the first page are models I created for SCRUG members Robin Larzelere and Terry Johnson.

Select the image beside Other Links of Interest to find the following:

- Architecture-related videos I have made and posted on YouTube
- More of my Revit models
- Links to some of the architects who are continuing Organic Architectural design
- Rammed earth builders
- Revit Architecture how-to documents (still a work in progress)
- Even more links on topics of interest.

There are also links to models of my antique telescope and of my observatory. Don't let anyone tell you that Revit is only good for modeling buildings!

I encourage you to check out the remainder of the <u>ashelford.net</u> website at your leisure.

Enough about me and my website. How about I review some of your training options?

Tips, suggestions, and resources I found most useful

This section contains tips, suggestions, and resources I found most useful, and which you might, too. Here are a few points to keep in mind:

- Passion is the best teacher
- Adult learners need to know WHY, and they need to apply it right away
- Be aware of how you like to absorb information
- Find others to teach. The best way to learn something is to teach it to another.

Please let me know if you have other resources you highly recommend so that I may add them to this section.

Training Modalities: VAK - What works best for you?

"Andragogy" or Adult Learning Theory is defined as "The art and science of helping adults learn". It is a continuum ranging from teacher-directed to student-directed learning. Adults, much more so than children, need to immediately apply what they learn; and if what they are learning is not immediately relevant, it may soon be forgotten.

There are three primary training modalities, which are: Visual, Auditory, and Kinesthetic. Learners use all three modalities to learn new information. However, one or two of these styles is normally dominant. If your learning preference is toward the visual, then seek out online videos. If your preference is for auditory presentations, then seek podcasts and lectures. Those favoring Kinesthetics may benefit from taking notes so that they may use their hands.

With that in mind, here is a list of some of the training resources you may access:

Training resources

There are a number of training resources available to you such as:

- Revit user documentation
- Vendors
- 3rd party books
- Conferences
- User Groups
- Community college classes
- Online
- Tutoring.

This is not intended to be an exhaustive list. Again, please let me know if you have other resources you highly recommend so that I may add them to this section.

Revit user documentation

While I did not care for the Autodesk "Imperial Tutorials" (at least not the version I used), I recommend the "Users' Guide" highly. The Online Help will most likely have the answers to many of your questions. Also, be sure to make use of the Search functionality, which is built into the Revit software.

Reseller sources

Revit resellers offer the following:

- Official Autodesk training sessions
- Online support
- Telephone support.

I never followed this route, but having been to many other software classes, I offer this caution: such training sessions usually consist of a mammoth data dump. You may be comatose after spending all day for four or five days straight in a class. What's more, you may or may not have a project to which you can immediately apply what you have learned, which means you are less likely to retain it.

3rd party books

Search the http://www.amazon.com website in the "Books" section for the terms "Revit 2013". Use the year that matches the version of

Revit you are using. Here are two books – with content by members of SCRUG – I found most useful:

- Jim Balding's book "Introducing and Implementing Revit Architecture 2013"
- Stephen Stafford's book "Introducing Autodesk Revit Architecture 2013"

Books by other authors:

- "Mastering Autodesk Revit Architecture 2013" by Krygiel, Read, and Vandezande
- "Autodesk Revit Architecture 2013" by Sham Tickoo NOTE: the Index for this book is poor!

Here is an important point on using an index: choose your search terms carefully! A book's author may use different words for the same thing (for example, "opening" vs. "skylight"). The author may be using terms reflected in the Revit User Interface (UI), rather than the terms you might be inclined to use. Browse the Revit UI and note the terminology used.

Conferences

Conferences are great ways to learn – from renowned experts, vendors, and your peers. Here are two conferences I recommend:

The next North American RTC is in Vancouver, Canada, in July of 2013. Registration opens in March. As with the official training sessions, you may be comatose after spending all day for four or five days straight, but the diversity of levels and topics is awesome. There are classes at all levels, from beginner to ultra-advanced and everything in between, by renowned subject-matter experts.

Autodesk University in Las Vegas is scheduled near the end of the year. You may be able to view sessions online after the conference.

User groups

User groups are a great source for information and assistance. The local groups include SCRUG, LARUG, SDRUG, and BUGIE. Ask users for help. Many folks are shy or don't want to admit that they don't know how to do a specific task, but I urge you to muster the courge to ask! Chances are someone at the meeting may have the specific knowledge you seek, and there may be others in attendance with the same question (but less courage) and you will have helped them, too. Asking questions is also a great way to meet and network with other members.

My favorite feature of past SCRUG meetings was "Stump The Chumps," in which you get to ask technical questions of the assigned Revit expert (Chump). I hope Jay reinstates "Stump The Chumps", and not just because I have managed to stump the chump many times. It has helped me feel more confident when even the expert does not know the correct answer to my questions.

Everyone who is serious about learning Revit should join Autodesk User Group International (AUGI), and follow the Revit forums diligently. There is a huge amount of useful data on those forums.

Community college classes

Some community colleges offer classes in Revit Architecture, Revit Structure, and so on. I've never taken such classes, but you may find them helpful.

Online

More and more information is available online. You can learn a lot by accessing any or all of the following:

- How-To videos on the Internet, such as the classes offered by http://www.lynda.com and the classes that were offered by Will Harris
- Revit blogs
- Use Google, or your favorite search engine. As with an index in a book, choose the search terms carefully by searching for the term "Revit" followed by the specific term or terms you are interested in. Again, try different terms for the same things. Think about how the author may refer to a term ("opening" vs. "skylight", for example).

Please let me know of any other resources you recommend so that I may add them to this section.

Tutoring

One-on-one, customized training would be awesome if you can find and afford it.

But no matter which avenues you use, don't give up – keep trying! Persistence and passion are key. I kept learning because I really enjoy creating Revit families, models, and creating beautiful renderings. If you have the passion, you can master Revit!

Mentoring and learning

One of the best ways to learn something is to teach and mentor others. My willingness to help fellow Revit users is best expressed by this quote:

"The best way to learn is to teach." ~ Frank Oppenheimer

Here are a few more of my favorite quotes on the importance of lifelong learning:

"More than ever now, lifelong learning is the key to getting into, and staying in, the middle class." ~ Thomas Friedman

"Illiteracy will not be defined by those who cannot read and write, but by those who cannot learn and relearn. Any form of standing still is deadly." ~ Alvin Toffler

"In times of change, learners inherit the earth; while the learned find themselves beautifully equipped to deal with a world that no longer exists." ~ Eric Hoffer

About me

I am an architectural designer, Revit modeler, teacher, writer, and problem solver. I aspire to be a Revit evangelist and mentor, and to encourage others to be the same.

Contact me for more information.

Luis Ashelford 1711 Perkins Lane Redondo Beach, CA 90278

Voice: 1.310.405.3581 Email: luis@ashelford.net

Website: http://www.ashelford.net

LinkedIn: http://www.linkedin.com/in/lashelford